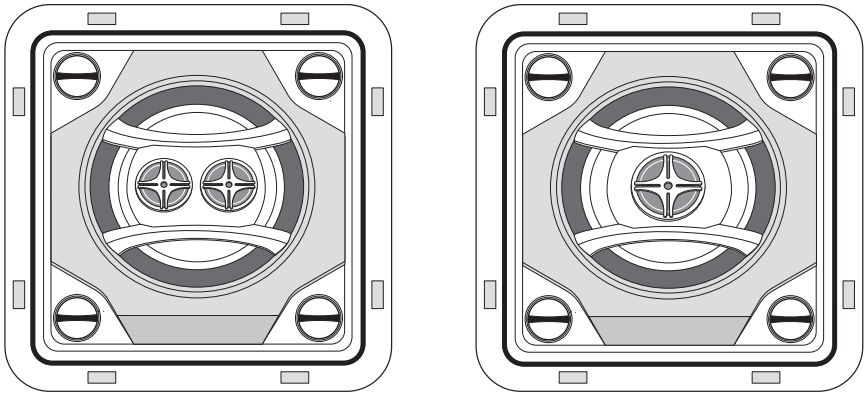
Russound®



Acclaim™ 7 Series

In-wall Iso-Mount™ Fixed Tilt Loudspeaker

Installation Manual

Introduction

Thank you for selecting the Russound Acclaim 7 Series Fixed Tilt In-wall Speakers. Like all Russound speakers, they combine acoustic technology with durability and will provide years of musical enjoyment. The Acclaim line provides solutions for background music, dedicated music listening and home theater.

The 7 Series line combines premium acoustic materials, with our most advanced drivers to deliver exceptional performance in every application. From background music to spectacular surround sound, Acclaim speakers offer the finest sound around.

Iso-Mount technology takes the Acclaim 7 Series beyond ordinary In-wall speakers by reducing undesirable wall vibrations with a unique thermopolymer isolation mounting gasket. Where typical In-wall speakers lack clarity due to speaker-induced wall vibrations, Iso-Mount speakers offer dramatic sonic improvement by letting the music come only from the speakers, not from the wall. In addition, the innovative Twist & Lock mounting system incorporated in Iso-Mount models provides exceptionally easy and secure installation.

In addition to Iso-Mount, the Russound Acclaim 7 Series speakers feature high quality drivers, sophisticated crossover networks, and advanced designs to ensure optimum reproduction.

Speaker Wire

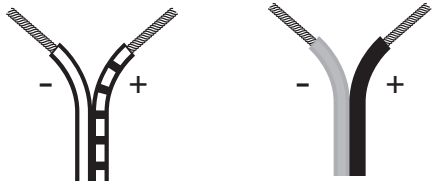
The amount of wire needed varies with speaker placement. Label speaker wires with left, right, and room location.

What kind to use: We recommend using Russound AW series speaker cable or any reputable brand of 16 to 12 gauge multi-stranded wiring for amplifier-to-speaker connections.

Selecting the proper gauge: Wire is measured in gauges: the bigger the number, the smaller the wire. The gauge of wire needed is determined by the distance between your amplifier/receiver and the speakers. The longer the run, the heavier the gauge needed. Use the following chart as a guide:

Length	Minimum Gauge
0' to 100'	16
50' to 150'	14
100' to 200'	12

If the conductors are not sheathed in colored jackets, utilize the conductors consistently. The standard colors on the terminals are red Positive (+) and black Negative (-). If the wire has transparent insulation, one conductor will be copper-colored (+) and the other silver-colored (-). If the wire has an opaque insulation, the conductors are differentiated by a series of ribs or grooves, a stripe, or dotted line on one conductor. Use and mark these as the Positive (+) conductor.



Typical usage of speaker wire conductors

Installation Tips

Wall and spacing requirements:

- Any wallboard or paneling and 2" x 4" stud wall, or lath and plaster walls.
- A minimum depth of 3⅝" (9.2 cm) measured from the outside face of the mounting surface, and at least 1 cubic foot of space behind the speaker for optimal performance.

When installing the speakers, avoid:

- Brick or concrete walls where the wallboard or paneling is attached to thin furring strips.
- Walls where there are pipes, heating ducts and especially AC wiring in the general vicinity.

Speaker Wire Paths

- Avoid running speaker wires close to house electrical wiring for any distance. If you have to run them parallel, leave two feet between the wiring. Speaker wires should cross AC lines at a 90° angle.
- The entire path between speakers and amplifier should be clear and unobstructed. Confirm the placement for the wall port close to the intended location of the amplifier or receiver.
- Label speaker wires at each end with left and right and the room location.

Impedance Matching for Amplifiers and Speakers

Not all amplifiers or receivers can safely operate two sets of speakers at once. If you intend to use more than one pair of speakers at a time it's important to consider both the impedance of the speakers and the capabilities of the amplifier or receiver you're using.

SPEAKER PLACEMENT

Use and Placement

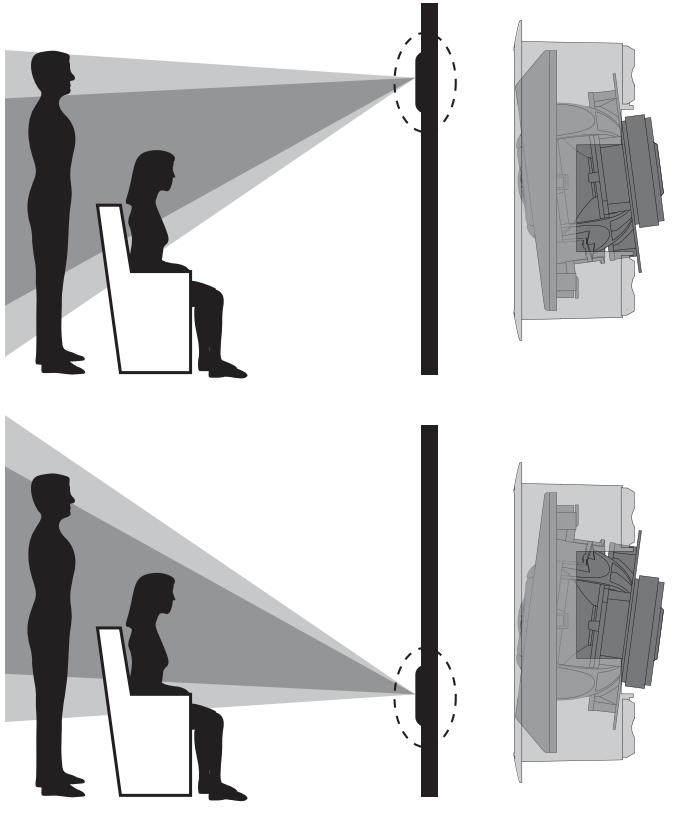
The advantage of the 7W51SFT and 7W52FT models' fixed tilt design is that they can be mounted in less than perfect locations and still be directed towards the listener.

There are several factors to keep in mind before you begin actual installation. In general, the best acoustic performance will result if both speakers face a similar type of surface, are placed in similar positions on the same wall or ceiling, and are mounted to the same type of material with equal cavity volume.

Bass frequencies are emphasized when an In-wall speaker is placed close to a corner. This tends to make male voices sound deeper and may muddy some sounds such as sound track dialogue. Avoid placing just one speaker in a corner and another on a long flat wall.

Treble is emphasized when it bounces back from reflective surfaces such as large windows. Conversely, highs tend to be muffled by soft surfaces such as drapes, rugs, upholstered furniture, etc. The best situation is a mix of absorptive and reflective surfaces, which can be achieved by adding throw rugs or insulated drapes to a reflective room.

The tweeters should be aimed at ear level of the intended user.



Fixed tilt speaker placement options

Speaker Placement in the Room

Placement can make all the difference in how your Russound speaker system sounds. There are at least four related considerations that factor into the speaker layout:

- The intended use: critical listening, home theater, or background music
- The room's physical characteristics: hard, reflective surfaces or soft, absorbent textures
- The listening locations: a desired prime listening spot or a need for sound throughout the room
- The available locations: unobstructed wall and ceiling surfaces

It may happen that the ideal or desired locations for the speakers may have to be modified for feasibility.

All rooms have different sound characteristics. Speaker location, listening location, reflective and absorbing surfaces all have a dramatic effect on the sound you hear.

Stereo Imaging

If your Russound In-wall Speakers are going to be your primary listening source in a room, you need to consider some other factors to insure proper imaging. The term "stereo imaging" refers to a speaker system's ability to project music so that it sounds like the performers are in a three-dimensional space between the speakers. It's the whole point of having stereo instead of monophonic sound.

To achieve good stereo imaging, the speakers are best located 6' to 8' (1.8m-2.4m) apart on the short wall of a rectangular room. Optimally, tweeters should be directed towards ear level when the listener is seated. Ceiling mounted speakers are best located slightly forward of the listening position with the angled baffle toward the listener. Also, the tweeter can be angled toward the listener for additional sound.

Home Theater

When setting up a home theater surround sound system, it is preferable to use wall mount rather than ceiling speakers for the front three channels. The three front speakers should be at close to equal heights, and angled toward ear level when the listener is seated. The center channel speaker (Acclaim 7 Series LCR) should be located above or below the TV screen aligned with the center of the screen and directed at ear height. The left and right speakers should be about 3' or 4' to either side of the screen. Left and right speakers placed too close together or too far apart dissipate the illusion of being "in the action" on the screen.

For home theater, wall or LCR speakers for the front three channels create the illusion that the sound is coming from the screen, which makes the viewing experience more involving and believable.

- Place the front speakers close to the same plane as the front of the TV as possible.
- Aim the baffle and tilt the tweeters so they aim at the prime listening position.
- Align the center channel speaker with the center of the screen, and place the left and right speakers no further than 4' (1.2m) from either side of the screen.

SPEAKER PLACEMENT

Surround Sound

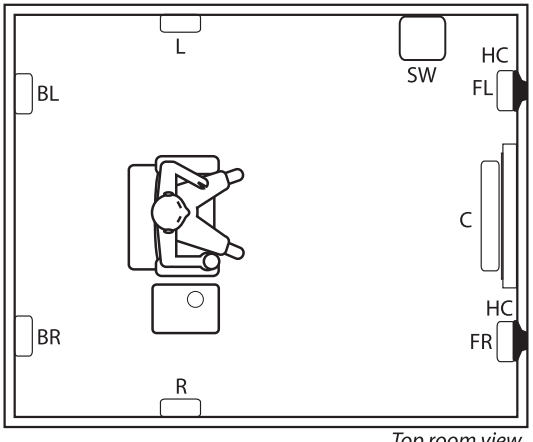
If the prime purpose of the surround system is to watch TV and movies, the surround speakers should be placed to produce a diffuse sound field. Iso-Mount wall speakers should be placed to the sides or rear of the prime listening location, located 24" (61 cm) or more above ear level when the listener is seated.

For TV and movies, ceiling surround speakers should be placed directly to the sides or rear of the prime listening position, and aimed toward the listener. This configuration is also suitable for a TV/movie and music mixed use.

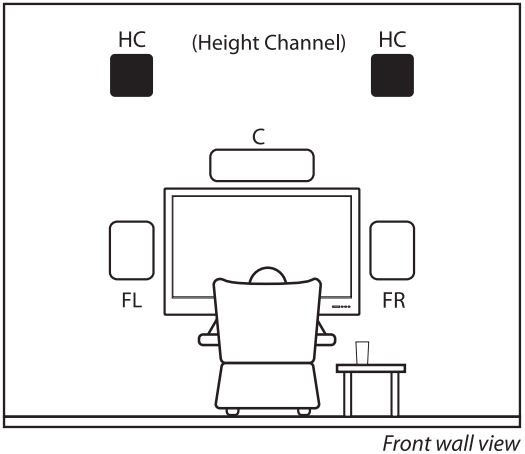
The 7W52 makes an excellent height channel for the new Dolby® Pro Logic IIz standard which introduces a vertical aspect to the sound field through the addition of left and right-channel front height speakers mounted above the main speakers. The 7W52's Iso-Mount and fixed tilt design work well in this application, which adds height to the front speakers to enhance the overall surround sound experience.

Placement Options

- *Good placement for serious listening:* Stereo pair in-wall. 6' to 8' (1.8m-2.4m) apart, on the long wall of a rectangular room, centered on the listening area. In-wall speakers should be at ear height when seated, if possible, and angled toward the listener.
- *Best placement for serious listening:* Stereo pair in-wall. 6' to 8' (1.8m-2.4m) apart, on the short wall of a rectangular room, centered on the listening area. In-wall speakers should be at ear height when seated, if possible, and angled at the listener.
- *Good placement for background listening:* Stereo pair behind, above or to the sides of the main listening area. 6' to 8' (1.8m-2.4m) apart, centered on the listening area. If in-wall speakers are at ear height directly behind the seated location they will be more distracting because the high frequency response will be more prominent. Preferred placement is off to the side.
- *Surround sound:* The multiple surround locations can all be made to work as long as the speakers are properly directed toward the listener.



Top room view



Front wall view

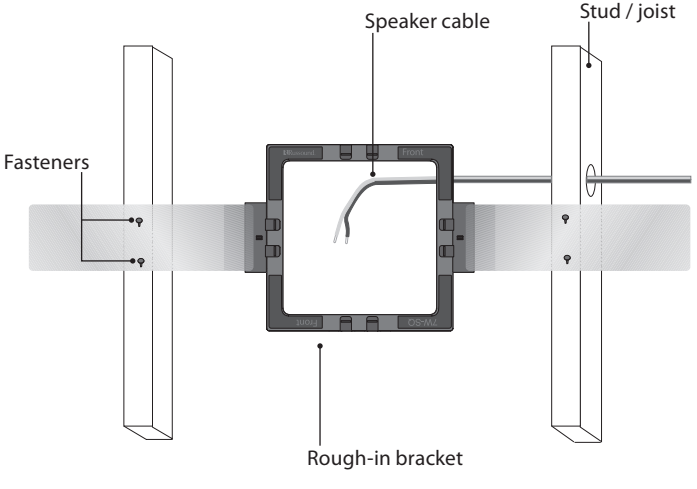
Home theater surround sound placement options

Pre-wire or Pre-construction

Locate all obstructions (AC wiring, plumbing, duct work, and studs). Route the speaker wire to the speaker location avoiding all obstacles.

Russound offers Speaker Rough-In Brackets (SB-W50FT) that can be fastened to the adjacent studs. Use a small level to make sure the bracket is straight. Once the dry wall is installed, the opening is cut out. There are holes molded into the bracket for speaker wire tie-off to keep the wire from being lost during construction.

Make sure the speaker cutout (hole) doesn't extend further than ¼" (0.6 cm) from the inside of the mounting bracket.

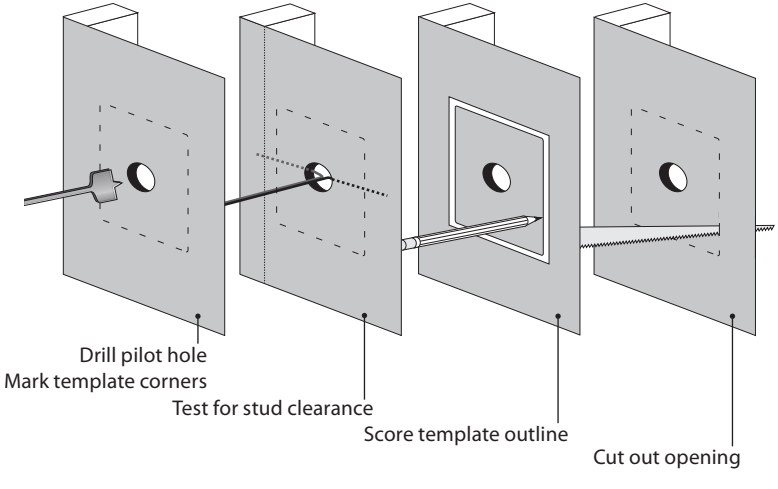


Bracket installation

Retrofit Installation

Locate existing pipes, duct work, and AC wiring before cutting any holes in the walls.

1. Center the cardboard template between adjacent joists, avoiding all wiring, pipes, duct work, and lightly mark the corners with a pencil. Then use a keyhole/drywall saw or motorized spiral-cut tool to make the opening.
2. Score the outline of the template with a utility knife to prevent chipping. If dealing with lath and plaster or thick paneling, drill 1" (2.5 cm) holes in several places around the pencil outline. Use a fine-toothed keyhole saw or hacksaw blade with slow strokes to saw through and remove the inner surface.



Retrofit installation

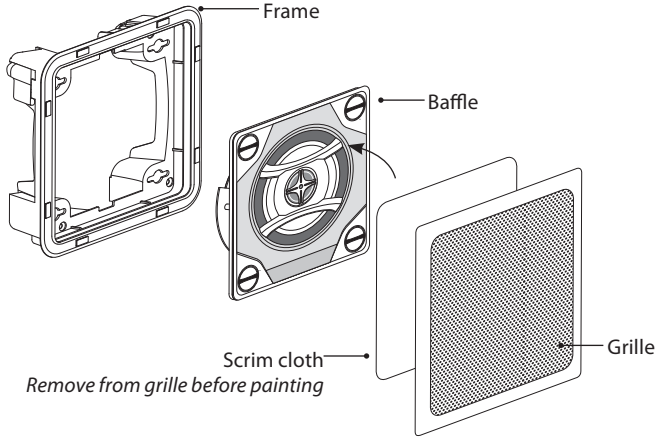
Additional Tips / Considerations

- If possible, run speaker wires after AC wiring is in place to avoid induced hum caused by close parallel proximity of the two types of wire.
- Secure speaker wires in place against a stud along vertical runs with insulated staples only. Do not pierce the wire insulation. Allow a bit of slack for expansion of building materials.
- Route horizontal wire runs through holes drilled in studs at roughly equal heights.
- The speakers should not be installed until the wallboard is in place. In the meantime, leave several feet of wire coiled up and secured to the back side of the mounting frame. Excess length can be removed during final assembly.
- When installing the drywall, make sure the speaker cutout hole doesn't extend farther than ¼" (0.6 cm) from the inside of the mounting frame.
- Terminate the wires in an outlet box attached to a stud or retrofit junction box at the exit location. Utilize an outlet plate which has connections for speaker wire terminations. Russound dealers offer a full line of Russound PlateMate™ connection systems.
- After the drywall is secured and finished, install the speakers as described in this manual.

Painting the Speaker Frame and Grille

Russound Acclaim Speakers have a designer white finish that can be painted with ordinary latex paint.

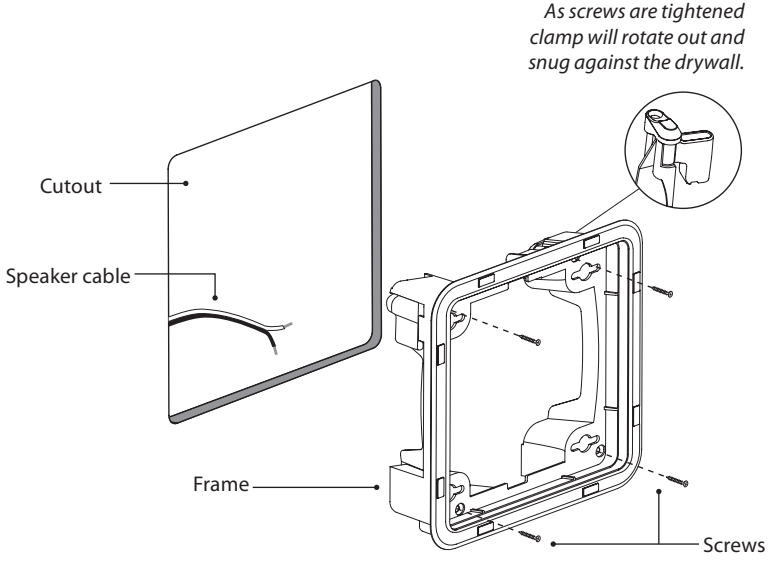
1. Remove the magnetic speaker grilles. If the speaker is already installed, gently pry under the frame to lift the grille.
2. Remove the scrim cloth from the grille and set aside.
3. Paint the grille and its frame. Russound recommends diluting the latex paint with water 4:1 or 5:1 proportionally.
4. While the paint is still wet on the grille, use a gentle burst of compressed air against the outside surface to clear the fine holes in the mesh.
5. After the paint has thoroughly dried, replace the scrim and continue with the installation.



Speaker assembly

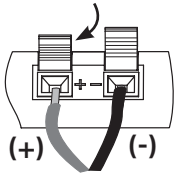
Installation

1. Remove the grille and baffle from the speaker by turning counterclockwise the four twist lock knobs in the four corners.
2. Center the frame in the cutout. Make sure the speaker is level. Tighten the screws equally until the clamps secure the frame. Do not overtighten.



Install speaker frame

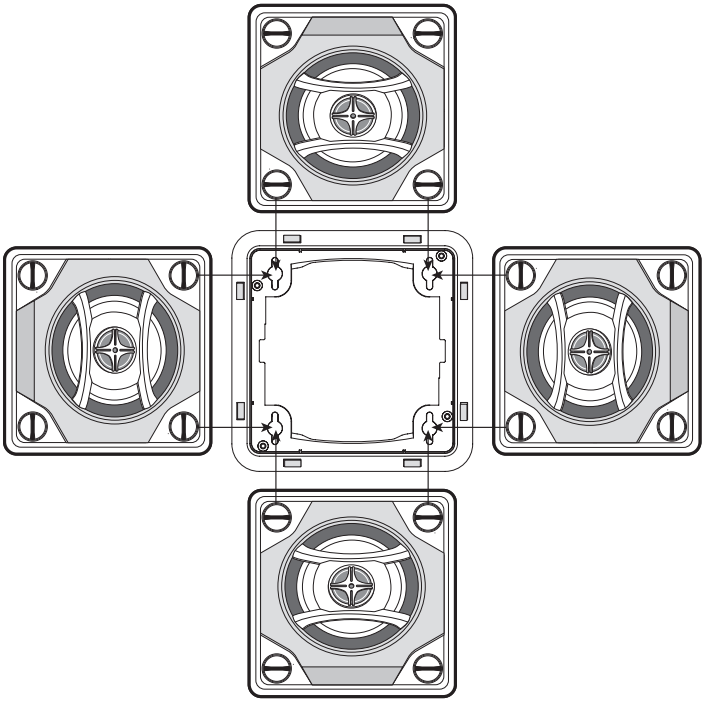
3. Connect the speaker wire to the speaker terminals:
   - Leave about 1' (30.5 cm) of wire extending through the cutout.
   - Pull the conductors apart so the last two inches are separated and remove ½" (1.3 cm) of insulation from the end of each conductor.
   - Twist the strands in each conductor into tight spirals.
   - Attach the speaker wires to the red and black speaker terminals. Connect the Positive (+) conductor to the Red terminal and the Negative (-) conductor to the Black terminal. Make sure that no stray strands of wire are touching the other conductor or terminal.



Insertion of speaker wire on back of speaker baffle

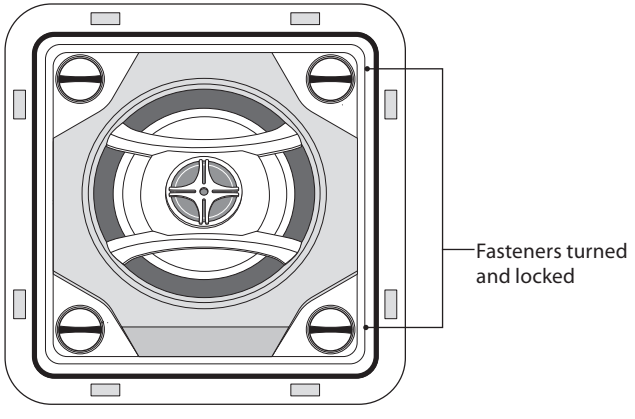
Installation

4. Choose the baffle angle to direct the sound toward the listening position. The fixed tilt loudspeaker has a 7-degree angle for dispersion adjustment. The baffle can be aimed in any of four directions as depicted below.



Four dispersion directions for the fixed tilt loudspeaker

5. Place the baffle in the frame and turn the Twist and Lock fasteners a quarter turn clockwise to secure the baffle. Some force will be needed to compress the gasket. Make sure the gasket is properly seated.



Installed baffle

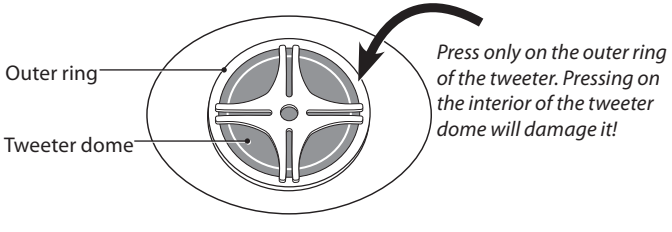
Listening Test

It's a good idea to test everything at this point.

1. Turn on your stereo system or music source. Make sure that the volume control is turned down and that the balance control is set to center.
2. Gently turn up the volume. You should hear music coming out of your new Russound Speakers! (If you don't, refer to the troubleshooting guide.)
3. Now rotate the stereo's balance control all the way to the left. Sound should only come out of your left speaker. If it comes out of the right speaker, skip to Step 5.
4. Rotate the balance control all the way to the right. Sound should only come out of the right speaker.
5. If sound comes from the right speaker when the stereo's balance control is turned to the left, you'll need to change the connections on the back of the amplifier/receiver. **Note:** Turn off the amplifier. Swap the wires attached to the left and right speaker terminals.

Tweeter Adjustment

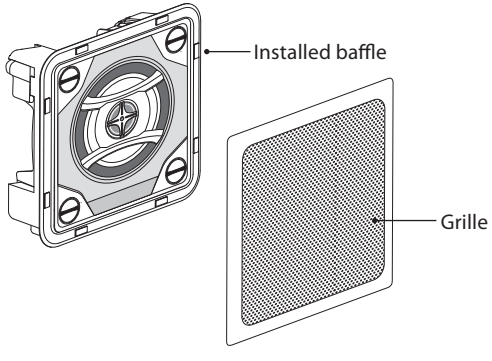
The tweeter pivots on Model 7W52FT and should be aimed toward the intended listener. Before installing the grille, gently press on the outside of the tweeter ring as shown.


Outer ring
Tweeter dome
Press only on the outer ring of the tweeter. Pressing on the interior of the tweeter dome will damage it!

Tweeter adjustment

Grille Installation

After all adjustments and listening tests are made, install the grille. Attach the speaker grille by placing it over the speaker baffle and aligning its edges in the frame. Press gently into place. The magnets in the frame will hold the grille securely in place.



Grille installation

Troubleshooting Guide

Before returning your Russound speakers for service, try these simple remedies first.

No sound from either speaker:

- Incorrect source selected on receiver or preamplifier.
- Mute button pressed on receiver.
- Wrong speaker output selected; many receivers have an "A" and "B" speaker switch. Make sure it is in the correct position.
- In-wall volume control not turned up or wired incorrectly.
- If using a speaker selector, room/station not turned on or improperly connected.

No sound from one speaker:

- Unsecured connection at either the speaker or amplifier - double-check all connections.
- Balance control turned all the way left or right - return it to center.
- Bad connecting cable between sound source and amplifier - try a new cable.
- Check for stray wire strands crossing the speaker terminals.
- Defective speaker - contact your Russound dealer or call Russound Tech Support at 603.659.5170.
- Any other problems not listed, discuss with your dealer or call Russound.

Model:	**7W51SFT**
Description:	2-way Single Point Stereo Fixed Tilt In-wall Iso-Mount Loudspeaker
Dispersion adjustment:	Fixed 7 degree angle
Woofer:	5.25" (13.33 cm) Polypropylene
Tweeter:	(2) 0.5" (1.27 cm) PEI
Cutout:	7.4" x 7.4" (18.7 x 18.7 cm)
Mounting Depth:	3.8" (9.65 cm)
Dimensions:	8.6" x 8.6" (21.85 x 21.85 cm)
Terminals:	12 gauge guillotine
Grille:	Aluminum with magnetic frame
Recommended Power:	10 - 75 watts RMS
Sensitivity:	88 dB SPL (2.83V @ 1m)
Frequency Response:	65 Hz - 20 kHz ± 3 dB
Frequency Range:	50 Hz - 20 kHz -6/+3 dB
Nominal Impedance:	6 ohms/6 ohms
Unit Weight:	3.07 lbs. (1.38 kg)

Model:	**7W52FT**
Description:	2-way In-wall Fixed Tilt Iso-Mount Loudspeaker Pair
Dispersion adjustment:	Fixed 7 degree angle
Woofer:	5.25" (13.33 cm) Polypropylene
Tweeter:	1" (25 mm) Silk Pivoting (15 degree angle)
Cutout:	7.4" x 7.4" (18.7 x 18.7 cm)
Mounting Depth:	3.8" (9.65 cm)
Dimensions:	8.6" x 8.6" (21.85 x 21.85 cm)
Terminals:	12 gauge guillotine
Grille:	Aluminum with magnetic frame
Recommended Power:	10 - 85 watts RMS
Sensitivity:	88 dB SPL (2.83V @ 1m)
Frequency Response:	63 Hz - 20 kHz ± 3 dB
Frequency Range:	51 Hz - 20 kHz -6/+3 dB
Nominal Impedance:	6 ohms
Unit Weight:	3.01 lbs. (1.35 kg)

WARRANTY

All Russound Acclaim 7 Series Speaker products have a Limited Lifetime Warranty against defects in materials and workmanship. Proof of Purchase must accompany all claims. During the warranty period Russound will replace any defective part and correct any defect in workmanship without charge for either parts or labor.

Russound may replace returned speakers with a product of equal value and performance. In such cases, some modifications to the mounting may be necessary and are not Russound's responsibility.

For this warranty to apply, the unit must be installed and used according to its written instructions. If necessary, repairs must be performed by Russound. The unit must be returned to Russound at the owner's expense and with prior written permission. Accidental damage and shipping damage are not considered defects, nor is damage resulting from abuse or from servicing performed by an agency or person not specifically authorized in writing by Russound.

Russound products are sold only through authorized Dealers and Distributors to ensure that customers obtain proper support and service. Russound reserves the right to limit the warranty of products purchased from an unauthorized dealer or other source, including retailers, mail order sellers, and online sellers, to ninety (90) days from the date of purchase.

Damage to or destruction of components due to application of excessive power voids the warranty on those parts. In these cases, repairs will be made on the basis of the retail value of the parts and labor. To return for repairs, the unit must be shipped to Russound at the owner's expense, along with a note explaining the nature of service required. Be sure to pack the speaker(s) in a corrugated container with at least 3" (7.6 cm) of resilient material to protect the unit from damage in transit.

Before returning the unit for repair, call Russound at 603.659.5170 for a Return Authorization number. Write this number on the shipping label and ship to:

Russound
ATTN: Service
5 Forbes Road
Newmarket, NH 03857

This Warranty Does Not Cover:

- Damage caused by abuse, accident, misuse, negligence, or improper operation (installation).
- Products that have been altered or modified.
- Any product whose identifying number or decal, serial #, etc. has been altered, defaced or removed.
- Normal wear and maintenance.

Due to our continual efforts to improve product quality as new technology and techniques become available, Russound/FMP, Inc. reserves the right to revise speaker systems specifications without notice.

Russound®

Acclaim™ 7 Series

In-wall Iso-Mount™ Loudspeaker Installation Manual

Models: 7W51SFT - 7W52FT

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28-1346 07/23/09